

GaAlAs T-1 PACKAGE INFRARED EMITTING DIODE

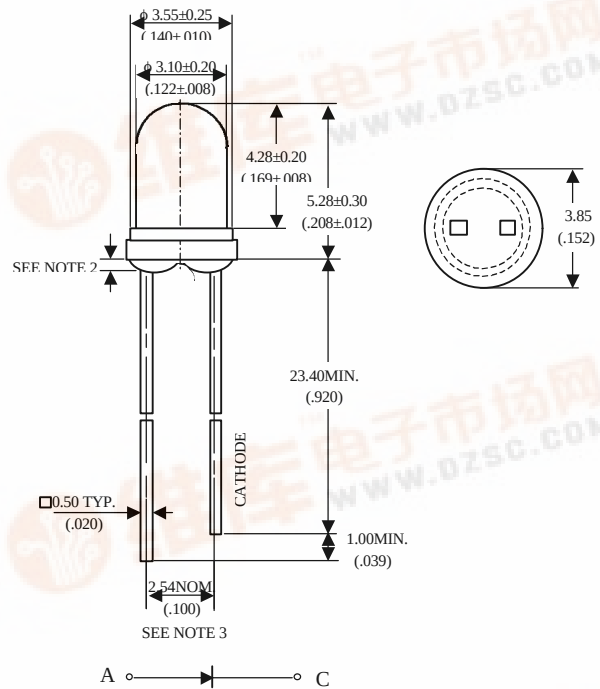
MIE-324L3

Description

The MIE-324L3 is an infrared emitting diode in GaAlAs on GaAlAs technology molded in water clear plastic package.

Package Dimensions

Unit : mm (inches)



Features

- High radiant power and high radiant intensity
- Suitable for DC and high pulse current operation
- Standard T-1 (φ 3mm) package, radiant angle: 40°
- Peak wavelength $\lambda_p = 880$ nm
- Good spectral matching to si-photodetector

Notes :

1. Tolerance is ± 0.25 mm (.010") unless otherwise noted.
2. Protruded resin under flange is 1.5 mm (.059") max.
3. Lead spacing is measured where the leads emerge from the package.

Absolute Maximum Ratings

@ $T_A = 25^\circ\text{C}$

Parameter	Maximum Rating	Unit
Power Dissipation	120	mW
Peak Forward Current(300pps,10μs pulse)	1	A
Continuos Forward Current	100	mA
Reverse Voltage	5	V
Operating Temperature Range	-55°C to $+100^\circ\text{C}$	
Storage Temperature Range	-55°C to $+100^\circ\text{C}$	
Lead Soldering Temperature	260°C for 5 seconds	

Optical-Electrical Characteristics

@ $T_A=25^{\circ}\text{C}$

Parameter	Test Conditions	Symbol	Min.	Typ .	Max.	Unit
Radiant Intensity	$I_F=20\text{mA}$	I_e		1.5		mW/sr
Forward Voltage	$I_F=50\text{mA}$	V_F		1.4	1.7	V
Reverse Current	$V_R=5\text{V}$	I_R			100	μA
Peak Wavelength	$I_F=20\text{mA}$	λ_p		880		nm
Spectral Bandwidth	$I_F=20\text{mA}$	$\Delta\lambda$		80		nm
View Angle	$I_F=20\text{mA}$	$2\theta_{1/2}$		40		deg .

Typical Optical-Electrical Characteristic Curves

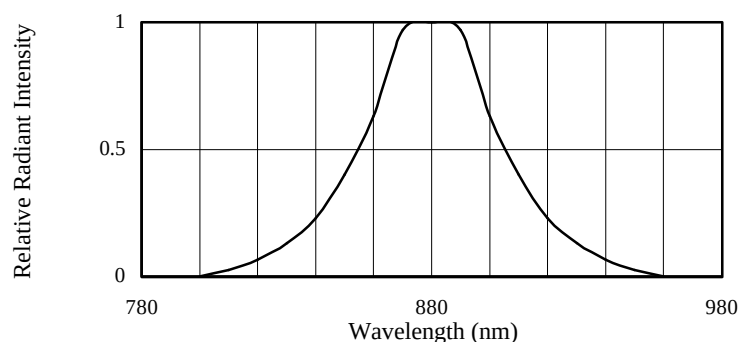


FIG.1 SPECTRAL DISTRIBUTION

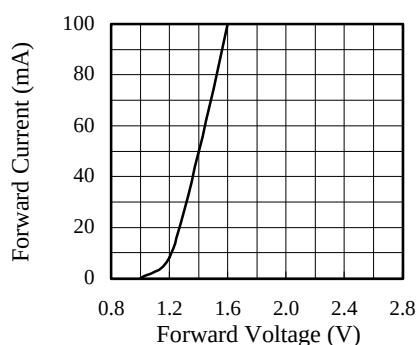


FIG.3 FORWARD CURRENT VS. FORWARD VOLTAGE

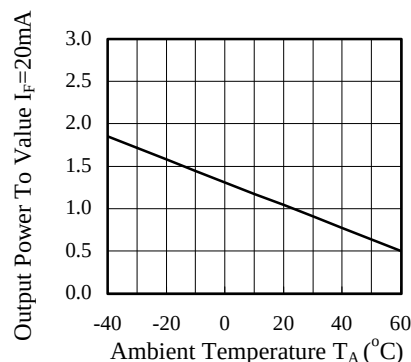


FIG.4 RELATIVE RADIANT INTENSITY VS. AMBIENT TEMPERATURE

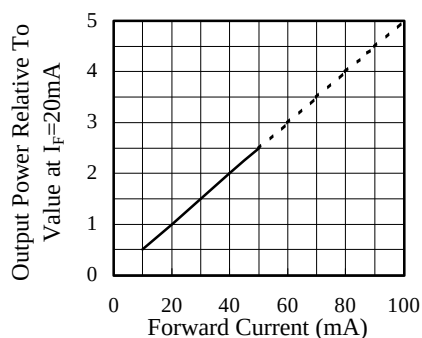


FIG.5 RELATIVE RADIANT INTENSITY VS. FORWARD CURRENT

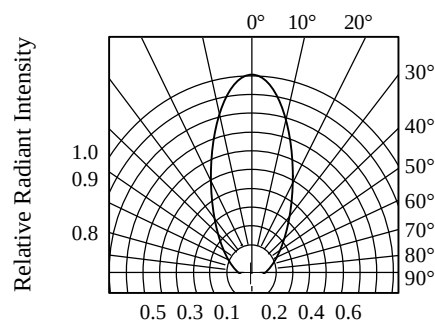


FIG.5 RADIATION DIAGRAM